

2007 PROPOSED SCOPE OF WORK for:**Project #: 8**

Operation and Maintenance of Gages

Lead Agency: U.S. Fish and Wildlife Service

Submitted by: Division of Water Resources
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Category:

- ☒ Ongoing project
☐ Ongoing-revised project
☐ Requested new project
☐ Unsolicited proposal

Expected Funding Source:

- ☐ Annual funds
☐ Capital funds
☒ O&M funds
☒ Other (Section 7)

I. Title of Proposal: Operation and Maintenance of Gages Important to the Recovery Implementation Program.

II. Relationship to RIPRAP:

Task # Task Description

Colorado River Action Plan

I.A.3.c.(3)(a) Deliver Ruedi flows to the 15-Mile Reach.

Green River Action Plan

I.A.3 Deliver identified flows

Yampa River Action Plan

I.B.2a.(2)(b) Elkhead Reservoir delivery flows for endangered fish

I.A.4a.(3)(e) Install and/or operate gages

Duchesne River Action Plan

I.C. Legally protect and deliver identified flows.

I.D. Coordinate reservoir operation

I.F. Determine the need and feasibility of additional gaging.

III. Study Background/Rationale and Hypotheses:

Over the years, the Recovery Program has identified a need to expand flow gaging in the basin to support development of flow recommendations, quantify sediment movement, and administer water secured for endangered fish. This Scope of work consolidates the Recovery Program gaging program and identifies the contributions of cooperating agencies. Cooperators are the Colorado State Engineers Office and the Central Utah Water Conservancy District. Utah gages

are funded with Program O&M funds that are passed through to cooperating agencies. Colorado gages are funded directly by the Recovery Program by funds administered by the Bureau of Reclamation.

IV. Study Goals, Objectives, End Products:

Provide a basis for refining the flow recommendations for the important stream reaches of the Colorado, Yampa, Price and Duchesne Rivers.

Provide a benchmark for future monitoring by video or aerial photography.

Gages will be used to aid scheduling releases from Ruedi, Wolford Williams Fork Elkhead and Green Mountain Reservoirs and other water sources which may be acquired by the Recovery Program.

Provide basic information for sediment modeling for the Little Snake and Yampa Rivers.

Upgrade gaging to provide reliable system for monitoring flows along the lower Duchesne River.

V. Description of Past Performance:

The Palisade gages have been operating continuously since 1990. The gages on the Duchesne and Uinta Rivers have been operating for 4 years. Gages on the Yampa River have been operating for seven years. 2007 will be the second year of operation for the Williams Fork Creek gage.

VI. Study Area:

Colorado, Green, Yampa, and Duchesne Rivers.

VII. Study Methods/Approach:

The Recovery Program will work with cooperators to contract with for the operation of gages important to the Recovery Program.

VIII. Task Description and Schedule:

- A. Operate and maintain the Palisade (15-Mile Reach) gage installed in FY-90 by the Recovery Program.
- B. Operate and maintain the two gages installed on the Yampa River installed in FY-97 by the Recovery Program. Recent funding shortfalls have resulted in the Recovery Program funding 1/4 of the cost of the Craig gage on the Yampa River. The gage on the Yampa River above Elkhead Creek and the

Gage on Williams Fork are need to administer releases from the enlarged Elkhead Reservoir.

- C. Operate and maintain the gages installed on the Duchesne and Uinta Rivers installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share in the operation of this gage.
 - D. Operate and maintain the temperature equipment installed on the Duchesne and Uinta Rivers installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share in the operation of this gage.
 - E. Operate and maintain the temperature equipment installed on the Jensen Utah gage installed in FY-98 for the Recovery Program. The Recovery Program will cost-share in the operation of this gage.
 - F. Operate and maintain the gage installed on the Price River during the summer of 2000. The gage was requested by the Biology Committee. River stage/flow and temperature will be collected. The Recovery Program will cost-share in the operation of this gage.
- IX Study Schedule: Typically gages are operated on a October to September fiscal year. Because of the change over to direct funding by Reclamation, the 2007 Operation of the Colorado gages begins January 1, of 2007, and continues through September 30, 2007.

Real time provisional data is available on the web at :

<http://waterdata.usgs.gov/co/nwis/current/?type=flow><http://www.usgs/nwis.gov>

The data is published in March of each year and is available in USGS annual water resource data reports. Historic data is also available on the web but usually lags two years because of quality assurance procedures and the volume of data which must be processed by USGS. The temperature for Lodore, Jensen and Deerlodge is available at:

http://waterdata.usgs.gov/nwis/uv?multiple_site_no=404417108524900%0D%0A09260050%0D%0A09261000&search_site_no_match_type=exact&index_pmcode_00010=5&index_pmcode_82292

X. 2007 Budget

Gage Name	COST	UCRIP	USGS	CWCB/SEO
Williams Fork Creek near Craig	\$ 4,000	\$ 2,000	\$ -	\$ 2,000
Yampa and Lodore Temperature	\$ 7,460	\$ 7,460	\$ -	
Yampa River Near Craig	\$ 3,600	\$ 1,910	\$ 1,690	
Colorado River Near Palisade	\$ 10,800	\$ 10,800	\$ -	
Yampa River Above Elkhead Creek	\$ 10,800	\$ 10,800	\$ -	
Yampa River Below Little Snake	\$ 14,000	\$ -	\$ 14,000	
Green River near Jensen (DCP & Temp)	\$ 4,550	\$ 2,275	\$ 2,275	
Duchesne River near Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Duchesne River above Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Uinta River at Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Duchesne River near Randlett (Temp)	\$ 4,400	\$ 2,200	\$ 2,200	
Price River Flow and (Temp)	\$ 17,600	\$ 8,800	\$ 8,800	
Duchesne R. at Myton	\$ 13,500	\$ 6,750	\$ 6,750	
TOTAL:	\$ 129,210	\$ 73,245	\$ 55,965	\$ 2,000

XI Reviewers: Recovery Program Staff.